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SCHOUWIA ARABICA (VAHL) A. P. DC.—A BRASSICACEA (CRUCIFERA) NEW IN MAHARASHTRA STATE

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ABSTRACT

Schouwia arabica (Vahl) A. P. DC. native of Abyssinia, Arabia and Egypt, is now found to occur in Maharashtra State, obviously as an accidental introduction. Its nomenclature is discussed. The plant is described, with a plate of analytical drawings.

During May 1959, along with a bunch of specimens sent for identification by the Soil Research Station at Awashi, Khed taluka of Ratnagiri District, a member of the Brassicaceae (*Cruciferae*) new to the region was noticed. Later in October, 1960, and again in March 1961, more specimens of the same species, from Dhond and Indapur, in Poona District, were sent by the Economic Botanist, Maharashtra Government, for identification. The plants were again collected from the latter two localities in April 1962, thoroughly studied in the fresh state; they have now been identified as *Schouwia arabica* (Vahl) A. P. DC. native of Abyssinia, Arabia and Egypt. Blatter has recorded this plant in his *Flora Arabica* (1919), but no mention of the species is made in any of the Indian Floras. No information is available on the precise methods by which this foreign plant was introduced, and began spreading in this country. It is, however, significant that the first plants collected happen to be from the Ratnagiri District, in the hinterland of the minor port of Ratnagiri, where Arabian Dhows frequently arrive to discharge cargo. The seeds of *Schouwia arabica* may well have settled on Indian soil, along with some merchandise from Arabia. It is also possible, that the plant has secured a foothold independently in other coastal towns visited by Arabian boats, either not recognised so far, or known under a wrong name. Since the known distribution of this Arabian plant in India is as yet from only three localities in Maharashtra State (Inset Map, *Plate* 1), in the thought that it would enable proper identification and help in its recognition in other places, an ample description, with an accompanying plate of analytical drawings, is here provided.

A further point of interest is that of nomenclature. *Schouwia* a member of the Brassicaceae (Cruciferae), was erected by A. P. DeCandolle, named in honour of the Danish Botanist Fred Schouw, and based this genus on Forskäl's *Subularia purpurea*. Vahl, based on the same plant, named his *Thlaspi arabicum*. Later, Schweinfurth made the combination, *Schouwia purpurea* (Forsk.) Schweinf. But H. A. Schrader had already used *Schouwia* as a generic name for a Malvaceous plant, with the result that the more familiar Candollean epithet became invalid. The Montreal Code (1961) has now conserved the name *Schouwia* A. P. DC. under the Brassicaceae (*Cruciferae*), with *Schouwia arabica* as the type species.

SCHOUWIA A. P. DC. Syst. 2:643. 1821, nom. cons.

Schouwia arabica (Vahl) A. P. DC. Syst. 2: 644. 1821. *Thlaspi arabicum* Vahl, Symb. 2:76. 1790. *Subularia purpurea* Forsk. Fl. Aeg.-Arab. 117. 1775. *Schouwia arabica* DC. var. *schimperi* Aschers & Schweinf. Ill. Fl. d'Eg. 42, n. 92. 1889. *Schouwia purpurea* (Forsk.) Schweinf. in Bull. Herb. Boiss. App. 2:183. 1896. *Schouwia purpurea* (Forsk.) Muschler var. *schimperi* Muschler, Man. Fl. Egypt, 1:418. 1912.

Annual, woody glabrous herbs, 25-75 cm. tall, dichotomously branching from the base. *Leaves* alternate, oblong-ovate to ovate-cordate, 1-4 cm. broad, 1.5-8.0 cm. long, auriculate amplexicaul at base, obtuse to acute at apex, entire, both surfaces glabrous, the adaxial bright green, the abaxial pale green, subfleshy when fresh, becoming membranous to chartaceous, and turning yellow on drying; midrib prominent, the vein network obscure when fresh, becoming distinct on drying. *Inflorescence* at first congested corymbose, at length becoming elongated to a slender raceme, the peduncle extending to 40 cm. in fruit; pedicels slender, 4-9 mm. long. *Flowers*: sepals green, erect, ovate, about 6 mm. long, 2.5 mm. broad; petals purple, unguiculate, about 8 mm. long, 2.5 mm. broad, finely veined; stamens tetradynamous; anthers sagittate, basifixed, 2-3 mm. long; filaments flat, 1.5-4.0 mm. long; ovary subelliptical, flattened, about 4 mm. long, 2 mm. broad; style subconical about 2 mm. long; stigma capitate, about 1 mm. thick. *Siliqua* subelliptical to orbicular-cordate, plano-compressed, emarginate, beaked, 2-3 cm. across, reticulate, broadly winged; replum linear, membranous. *Seeds* 2-seriate, many, on transverse or descending funicles, globose, immarginate; testa red- brown, thin, mucilaginous on wetting; embryo bent, the cotyledons fleshy, conduplicate, the radicle accumbent. (*Plate* 1.)

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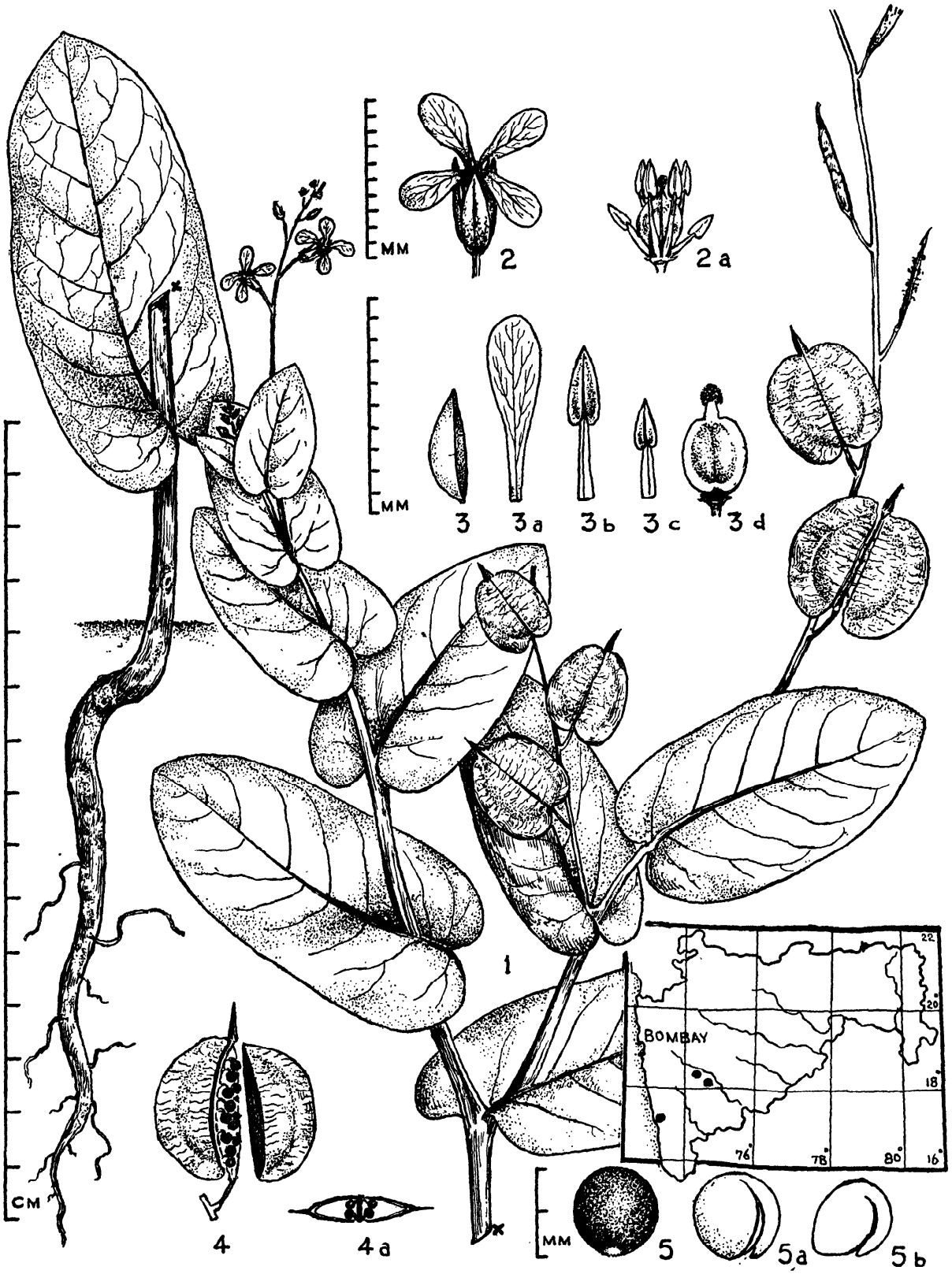

PLATE I. *Schouwia arabica* (Vahl) A. P. DC.

1. Habit. 2. Flower. 2a. Flower with sepals and petals removed. 3. Sepal. 3a. Petal. 3b. A tall stamen. 3c. A short stamen. 3d. Pistil. 4. Siliqua with one valve dehisced. 4a. Cross section of siliqua. 5. Seed. 5a. Seed with testa removed. 5b. Embryo (All drawn from fresh specimen). The inset map of Maharashtra indicates distribution.

Occurs along edge of cultivated fields, in dry sandy soil, noticeable due to its fresh green foliage when other herbaceous vegetation has dried up. Flowering from January to March, and fruiting from March to May.

Specimens studied: MAHARASHTRA—Ratnagiri District: Awashi, *Anon. s.n.*; Poona District: Dhond, *Thombre s.n.*; Indapur, *Anon. s.n.* [BSI]

LITERATURE CITED

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